

REMARKS

Applicants again would like to thank the Examiner for the indicated allowability of the subject matter recited in claims 4, 13, 18, 20 and 21 and respectfully request reconsideration of all remaining claims in view of the above-amendments and the following remarks.

I. CLAIM OBJECTION

Claim 6 is amended to clarify the steps relative to those in claim 5 from which it depends. With this amendment, Applicants respectfully request that the objection to claim 6 be withdrawn.

II. CLAIM REJECTIONS UNDER §102(e) BASED ON CHAINER et al.

Claims 1, 5, 8-12, 14 and 16 were rejected under §102(e) as being anticipated by Chainer et al., U.S. Patent No. 6,603,627.

Applicants would like to thank the Examiner for the detailed response to Applicants' arguments. The following arguments have been updated to address the Examiner's response.

A. **Chainer et al. Does Not Disclose A "Common Actuator Position"**

The Examiner acknowledges that Chainer et al. move the actuator from one position to the next while forced against the crashstop, but suggests that the claimed "common position" is the position of the actuator while forced against the crashstop.

The Examiner notes that "column 4, lines 8-11 indicates that a **series of tracks** are written when the actuator is placed against the crashstop." However, this citation reads in its entirety:

"Then, a series of tracks are written (Step 320) with the VCM dac stepped by a certain amount between tracks." (Emphasis added).

Thus, each track is written at a different position than the other tracks, not at a common position. Further, this

citation relates to writing tracks, not sensing lateral positions as in claim 1.

Chainer et al. expressly state that the actuator is moved to different positions. As described in the Abstract, Chainer et al. write an initial set of servo pattern tracks by,

moving an actuator against a compliant structure (e.g., crash stop) with a first force applied thereto to hold the actuator in a first position to write a first track of the servo pattern. The force is changed, thereby reaching a second position of the actuator against the compliant structure, at which a second track of the servo pattern is written. The process is iterated for additional tracks. (Emphasis added).

Thus, Chainer et al. do not disclose "a common actuator position" in the context of claim 1.

**B. Chainer et al. Do Not Sense Several Lateral Positions.**

Claim 1 includes the step:

determining an accessible track range for the surface partly based on several lateral positions sensed while urging the actuator laterally against a stop at a common actuator position.

The Examiner asserts that Chainer et al. make a check for all pairs of tracks and notes that the read head overlaps 3 tracks at a time. The Examiner suggests that by looking at the readback from each pair of tracks for all adjacent pairs, a range of accessible tracks is found.

But Chainer et al. do not sense lateral positions. Rather, they measure spacing between two adjacent tracks by measuring an "overlap" signal, "which is equal to the sum of the normalized readback amplitudes for a pair of tracks when the read element is positioned such that it overlaps both tracks by approximately equal amounts." (Col. 4, lines 20-24).

The overlap signal is an amplitude, not a sensed lateral position as in claim 1. Further, the overlap signal is a combined signal and is between only two tracks. Chainer et al. do not sense several lateral positions.

Thus, Chainer et al. do not sense "several lateral positions" while urging the actuator laterally against a stop at a common actuator position.

In fact, this difference further highlights the significant difference between determining a "track range" by sensing several lateral positions while urging the actuator laterally against a stop at a common actuator position, in claim 1, and measuring "track spacing" between a pair of tracks in Chainer et al.

**C. "Track Range" is Different Than "Track Spacing"**

Chainer et al. discuss "track spacing", not "track range. In col. 4, lines 20-27, Chainer et al. discuss that the "spacing between tracks is checked by measuring the 'overlap' signal (Step 330) which is equal to the sum of the normalized readback amplitudes for a pair of tracks when the read element is positioned such that it overlaps both tracks by approximately equal amounts. This overlap signal decreases with increasing track spacing and therefore provides a measurement of relative track spacing . . . ." (Emphasis added).

In claim 1, the phrase, "a track range for the surface" clearly refers to a range of tracks on the surface, not the spacing between a pair of adjacent tracks.

A person of ordinary skill in the art would understand that "track spacing" is much different than "track range."

Thus, Chainer et al. do not disclose:

- "determining a track range",
- sensing "several lateral positions"; and
- "a common actuator position."

With respect to independent claim 10, this claim includes the step of:

"urging an actuator against a stop while identifying each of several tracks at a common actuator position using a head supported by the actuator."

Again, in Chainer et al., the actuator is moved from one position to the next when writing the series of different tracks. During the overlap measurement, Chainer et al. measure the sum of the readback amplitudes for two adjacent tracks. The overlap signal is not an identification of each of several tracks.

Chainer et al. do not anticipate identifying each of several tracks at a common actuator position.

Since Chainer et al. do not anticipate each and every element of independent claims 1 and 10, Applicants respectfully request that the rejection of claims 1 and 10 and their respective dependent claims under §102(e) based on Chainer et al. be withdrawn.

III. CLAIM REJECTIONS UNDER §102(e) BASED ON TAKAISHI et al.

Claims 1-3, 5-12, 14, 16, 19 and 22 were rejected under §102(e) as being anticipated by Takaishi et al., U.S. Patent No. 6,819,519.

In order to simplify the issues, claims 19-22 are cancelled without prejudice. Applicants reserve the right to pursue these claims in one or more continuation applications.

A. **Takaishi et al. Do Not Sense Several lateral Positions at a Common Actuator Position**

Takaishi et al. describe a process for measuring a starting position of each head.

Takaishi state, "In order to do that, the MCU 8 moves the actuator 5 to the outer side of the disk, and at the point where the actuator will not move any further, the MPU 8 detects

the track address that is read by the head." (Col. 5, lines 62-66).

"In order to position the entire track when eccentricity occurs, it is necessary to detect the track where the maximum value of eccentricity is at the position of the outer stopper." (Col. 6, lines 4-7).

FIG. 7 is a flowchart of the measurement process for doing this, which is described in col. 6, lines 10-31. First, the system seeks a track position "StartTarget" that does not come in contact with the stopper. Next, the system decreases the target position SeekTarget by -1. The system then determines whether the head can move. For example, it determines whether the track number read by the head changes from seeking. This process repeats until the head cannot move any further. That target position is taken to be the maximum outer position for that sector position, and it is stored in a table.

This process is significantly different than and does not anticipate the process recited in claim 1 of the present application.

Takaishi et al. do not urge the actuator laterally against a stop at a common actuator position and sense several lateral positions while at the common actuator position. Rather, Takaishi et al. incrementally move the head one target position at a time toward the stopper until the head can move no further. That target position is taken as the maximum outer position.

Similarly, Takaishi do not anticipate "urging an actuator against a stop while identifying each of several tracks at a common actuator position using a head supported by the actuator," as recited in claim 10.

Since Takaishi et al. do not anticipate each and every element of independent claims 1 and 10, Applicants respectfully request that the rejection of these claims under §102(e) based on Takaishi et al. be withdrawn.

IV. CLAIM REJECTIONS UNDER §103

Claim 17 was rejected under §103(a) as being unpatentable over Chainer et al. in view of Lee, U.S. Patent No. 6,715,032. Claim 17 was also rejected under §103(a) as being unpatentable over Takaishi et al. in view of Lee.

Claim 17 depends from claim 10 and is thus allowable with the allowance of claim 10. In addition, neither Chainer et al. in view of Lee nor Takaishi in view of Lee teach or suggest the method of claim 1 and further including "a prior step of designating a system track band that includes a block of several annular system tracks and at least one guardband track on each side of the block," as recited in claim 10.

Applicants respectfully request that the rejections of claim 17 under §103(a) be withdrawn.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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